Natural Resources Canada | Ressources naturelles Canada

Fuel Focus

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

Issue 3, Volume 8

February 22, 2013

Canada

Copies of this publication may be obtained free of charge from:
Natural Resources Canada
Petroleum Resources Branch
580 Booth Street, 17th Floor
Ottawa, Ontario K1A 0E4
Phone: (613) 992-9612
TTY Service: (613) 996-4397 (Teletype for the hearing-impaired)
Fax (613) 992-0614
Email: prb.drp@nrcan-rncan.gc.ca
Web site: http://nrcan.gc.ca/eneene/focinf-eng.php

© Her Majesty the Queen in Right of Canada 2013

ISSN 1918-3321

Aussi offert en français sous le titre *Info-Carburant*

Fuel Focus

Volume 8, Issue 3
February 22, 2013

National Overview

Overall Pump Prices Increased 2.7 Cents per Litre from Last Week

For the week ending February 19, 2013, Canadian average retail gasoline prices increased by nearly 3 cents per litre from the previous week to $1.31 per litre—a four-month high. Since the last report two weeks ago, retail pump prices rose by 1 cent per litre. Prices are above last year's level by 3.5 cents per litre.

Average retail pump prices across Canada moved upward on higher wholesale gasoline prices, which reflected higher crude oil prices.

Diesel fuel prices rose by 2 cents per litre from the previous week to $1.35 per litre, while furnace oil prices increased by nearly 2 cents, ending at $1.26 per litre. Compared to a year ago, prices for diesel and furnace oil are 5 and 6 cents per litre higher, respectively.

Figure 1: Crude Oil and Regular Gasoline Price Comparison (National Average)

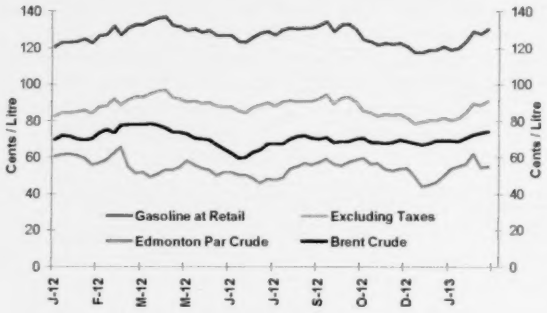
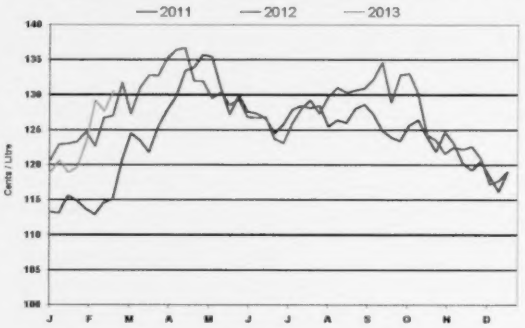


Figure 2: Weekly Regular Gasoline Prices



Recent Developments

- **Canadian Crude Oil Production Up 6%**: Production of crude oil and equivalent hydrocarbons increased 6% to 16 million cubic meters in November 2012 compared to the same period last year. Exports increased nearly 2% to 11 million cubic meters. About 70% of Canada's total domestic production went to the export market compared to 73% a year earlier. Imports increased 15% to 4 million cubic meters. (Statistics Canada, The Daily, http://www.statcan.gc.ca/daily-quotidien/130212/dq130212a-eng.htm)
- **OPEC's February Report**: The Organization of Petroleum Exporting Countries (OPEC) estimated it will have to produce 29.8 million barrels per day (b/d) to meet world demand in 2013, up 100,000 b/d from its previous estimate but 300,000 b/d below 2012 average production. The price of OPEC's basket of 12 benchmark crudes rose 2.5% in January to an average of $109.28/bbl. OPEC's estimate of world economic growth remained unchanged at 3% for 2012 and 3.2% for 2013. (Source: Oil and Gas Journal)
- **Obstacles to Unlocking U.S. Mid-West Oil**: While North American oil production is thriving, it is no secret that the light oil recovered from tight shale formations faces a complicated journey to refineries. Fortunately, new pipelines and rail capacity set to open in 2013 will allow more crude oil to move to refinery hubs to the east, west and the Gulf Coast. However, the U. S. faces another problem because U.S. crude exports are subject to stiff export restrictions. The U.S. refining industry has in effect become a conduit for crude oil exports, allowing rising U.S. crude production to be exported as products. In addition, U.S. refiners have a limited ability to absorb additional barrels of lighter grades from Eagle Ford and Bakken shale formations since much of their capacity is geared to process cheap, low quality, high sulphur crude oil grades. (Source: Maria van der Hoeven, International Energy Agency, http://iea.org/)

Changes in Fuel Prices

	Week of:	Change from:	
¢/L	2013-02-19	Previous Week	Last Year
Gasoline	130.5	+2.7	+3.5
Diesel	135.0	+2.4	+4.7
Furnace Oil	126.2	+1.8	+5.6

Source: NRCan

In this Issue

	page
National Overview	1
Recent Developments	1
Retail Gasoline Overview	2
Wholesale Prices	3
Refining and Marketing Margins	4
Crude Oil Overview	5

Retail Gasoline Overview

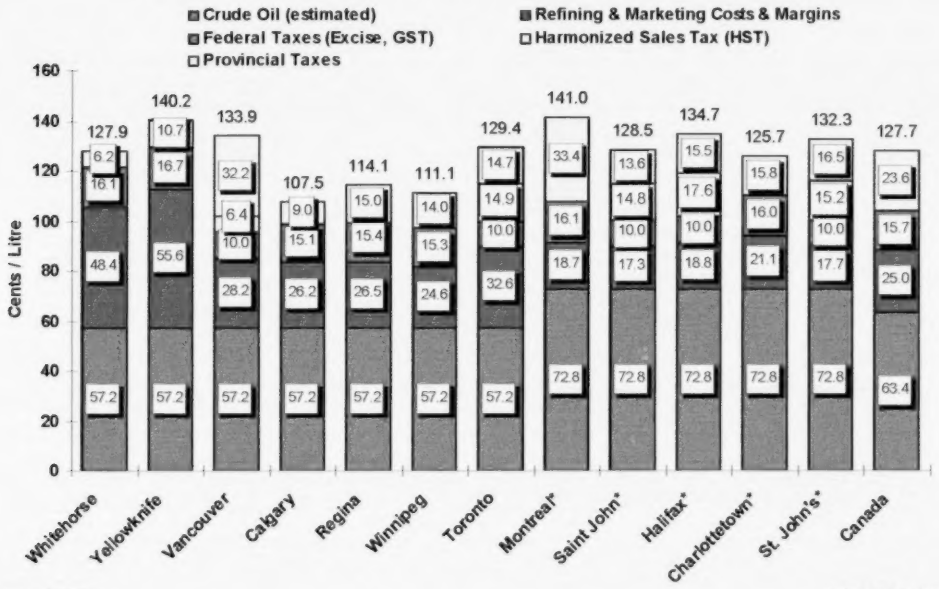
The **four-week average** regular gasoline pump price in selected cities across Canada was $1.28 per litre for the period ending **February 19, 2013**. This is 2 cents per litre higher than prices recorded at the same time last year.

The **four-week average** crude oil price component of gasoline registered at 63 cents per litre, up by 1 cent per litre from two weeks ago. Compared to the same period in 2012, the crude oil price component of gasoline is 0.3 cent per litre lower.

Ranging from $1.08 per litre to $1.34 per litre, retail gasoline prices in most Western centres increased, on average, by 6 cents per litre when compared to two weeks ago. Prices in Eastern centres increased on average by 4 cents per litre, and ranged from $1.26 per litre to $1.41 per litre.

At the national level, refining and marketing costs and margins increased by 3 cents per litre from two weeks ago, and are 2 cents per litre higher than last year at this time.

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (January 29 to February 19, 2013)



Source: NRCan

** Regulated Markets*

Petroleum Product Pricing Considerations

Petroleum product prices generally track the price of crude oil very closely, both the increases and the decreases as shown in Figure 1. When it appears that product and crude oil prices are not tracking, the real cause can generally be traced to underlying market supply issues.

The price that the consumer pays for a petroleum product depends on the product and how the product will be used. Wholesale prices for petroleum products react to a broad range of factors unique to their individual markets. Product prices are influenced by supply and demand balances as well as the prices of alternative products with which they compete. For example, propane can be used for heating, as an automotive fuel or for agricultural uses like crop drying. The demand for diesel fuel is directly related to economic activity, which is manifested in increased truck traffic to move goods and services in a robust economy.

Automotive fuels are distributed to consumers through retail outlets. The retail price, therefore, includes distribution costs as well as a number of federal and provincial consumption taxes. When the factors that can influence prices - supply/demand, crude oil costs, distribution costs, federal and provincial taxes and local market conditions - all come together, retail prices, and to a lesser degree wholesale prices, can vary significantly between markets.

Wholesale Gasoline Prices

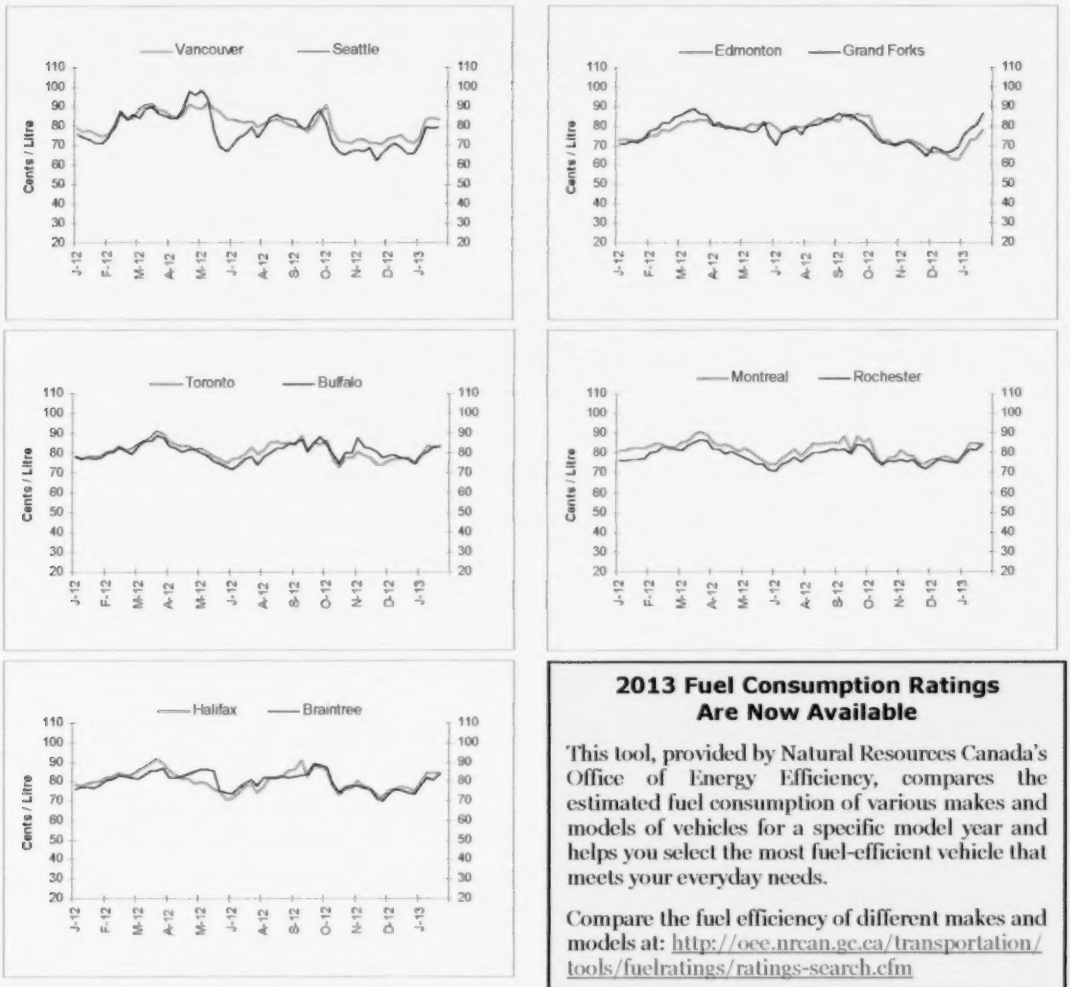
Wholesale gasoline prices increased in six of the ten centres for the **week of February 14, 2013,** compared to the previous week. Price changes ranged from an increase of 6 cents per litre to a decrease of almost 1 cent per litre.

For the Eastern markets in Canada and the United States, wholesale gasoline prices ranged from an increase of nearly 3 cents per litre to a decrease of less than 1 cent per litre when compared to the previous week, and ended the period in the 83 to 84 cent-per-litre range.

Wholesale prices in Canadian and U.S. Western centres ranged between an increase of 6 cents per litre to a decrease of 1 cent per litre, ending the period in the 78 to 86 cent-per-litre range. Wholesale gasoline prices in Edmonton rose nearly 16 cents per litre in the last 5 weeks from a low of 62 cents per litre.

In the last **four weeks**, wholesale prices in the selected Canadian and American centres have increased from 8 cents per litre to 17 cents per litre.

Figure 4: Wholesale Gasoline Prices
Rack Terminal Prices for Selected Canadian and American Cities Ending February 14, 2013
(Can ¢/L)



Sources: NRCan, Bloomberg Oil Buyers Guide

2013 Fuel Consumption Ratings Are Now Available

This tool, provided by Natural Resources Canada's Office of Energy Efficiency, compares the estimated fuel consumption of various makes and models of vehicles for a specific model year and helps you select the most fuel-efficient vehicle that meets your everyday needs.

Compare the fuel efficiency of different makes and models at: http://oee.nrcan.gc.ca/transportation/tools/fuelratings/ratings-search.cfm

Gasoline Refining and Marketing Margins

Four-week rolling averages are used for gasoline refining and marketing margins.

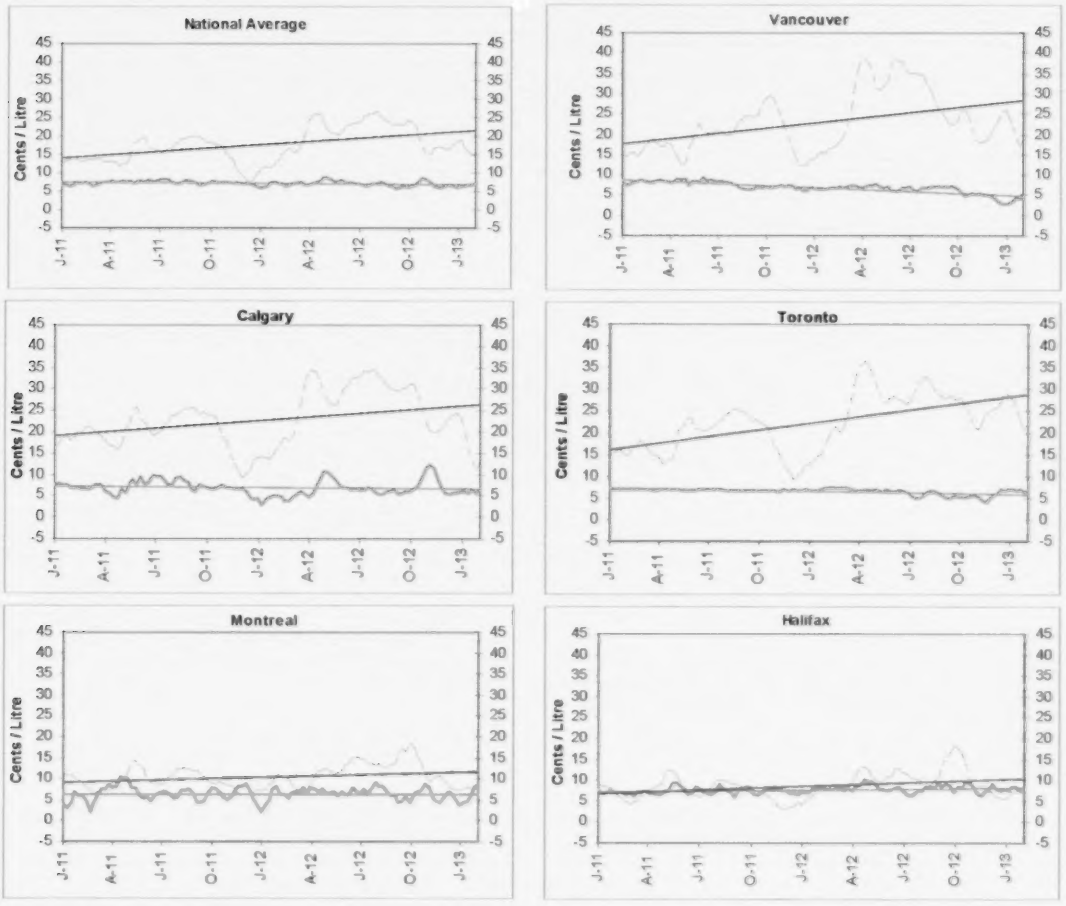
The refining margin is defined as the difference between the wholesale price of gasoline and the crude oil price. However, this margin is very much a function of the gasoline supply situation and local market conditions. In turn, local market conditions can have a considerable impact on short-term wholesale gasoline prices.

The marketing margin can differ significantly from city to city and region to region. These margins must cover the costs associated with transporting product through the distribution system.

Some of the distribution challenges arise from the fact that petroleum products are refined in only a few geographic regions but are consumed all across Canada.

Overall, this margin can be fairly volatile as shown in the Calgary, Montreal and Halifax markets, as outlets compete for market share. Conversely, they seem to be a lot less volatile in Toronto and Vancouver. Provinces such as British Columbia and Ontario, where the population is concentrated in large urban centres, are likely to have less retail gasoline outlets per capita which usually relates to throughput efficiencies and retail competitiveness with respect to pump prices.

Figure 5: Gasoline Refining and Marketing Margins
Four-Week Rolling Average Ending February 19, 2013
------- Refining Margin ——— Marketing Margin



Source: NRCan

Crude Oil Overview

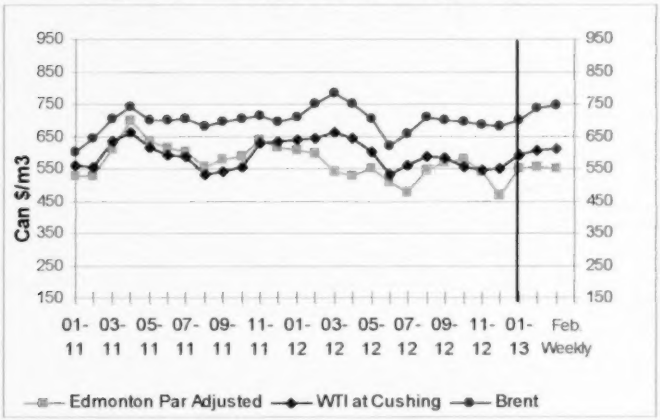
Modest Growth in WTI and Brent Crude Oil Prices; Edmonton Par Hovering

For the week ending February 15, 2013, prices for the three marker crudes averaged between $552/m³ and $745/m³ (US$87 to US$118 per barrel). This is an increase of $9/m³ (US$1 per barrel) for WTI. Edmonton Par declined by less than $1/m³ compared to the previous week. Brent increased by $12/m³ (US$1 per barrel)—its highest weekly average in more than 10 months. The price differential between Brent and WTI stood at $133/m³ (US$21 per barrel) for the week ending February 15, 2013, while the price differential between Brent and Edmonton Par was $193/m³ (US$30 per barrel).

The growing crude oil inventory at the Cushing, Oklahoma, delivery point for WTI contracts and the temporary constraints of the expanded Seaway Pipeline caused North American prices to remain almost unchanged from the previous week. Edmonton Par prices are influenced by the lack of pipeline capacity to move the Canadian crude to the U.S. Gulf Coast refineries.

According to the U.S. Energy Information Administration, over the next two years, planned additions to pipeline takeaway capacity should be sufficient to relieve the Cushing bottleneck.

Figure 6: Crude Oil Price Comparisons



Changes in Crude Oil Prices

Crude Oil Types	Week Ending: 2013-02-15		Change From:			
			Previous Week		Last Year	
	$Can/m³	$US/bbl	$Can/m³	$US/bbl	$Can/m³	$US/bbl
Edmonton Par	552.31	87.47	-0.53	-0.66	-36.33	-6.33
WTI	612.52	97.01	+8.84	+0.77	-25.15	-4.61
Brent	745.50	118.07	+11.53	+1.06	-5.78	-1.65

Source: NRCan

U.S. Energy Outlook

The U.S. Energy Information Administration (EIA) *Short-Term Energy Outlook*, released February 12, 2013, forecasts that the Brent crude oil spot price, which averaged $112 per barrel in 2012 and rose to $119 per barrel in early February 2013, will average $109 per barrel in 2013 and $101 per barrel in 2014. The projected discount of West Texas Intermediate crude oil to Brent, which averaged $18 per barrel in 2012, will average $9 per barrel in 2014 as planned new pipeline capacity lowers the cost of moving midcontinent crude oil to the Gulf Coast refining centers.

EIA expects that falling crude prices will contribute to a decline in the national annual average regular gasoline retail price from $3.63 per gallon in 2012 to $3.55 per gallon in 2013 and $3.39 per gallon in 2014, about 11 cents per gallon and 4 cents per gallon higher than forecast in last month's STEO, respectively. Diesel fuel retail prices averaged $3.97 per gallon during 2012 and are forecast to fall to $3.92 per gallon in 2013 and to $3.82 per gallon in 2014.

EIA estimates U.S. total crude oil production averaged 6.4 million barrels per day (bbl/d) in 2012, an increase of 0.8 million bbl/d from the previous year. Projected domestic crude oil production continues to increase to 7.3 million bbl/d in 2013 and 7.8 million bbl/d in 2014.

Source: U.S. EIA, http://www.eia.gov/forecasts/steo/index.cfm